

Ministry of
Colleges and
Universities

Apprenticeship
Training

Tool Maker

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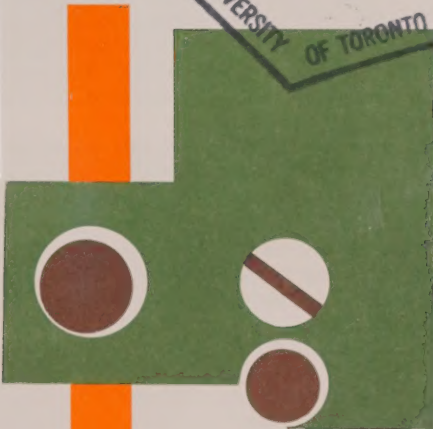
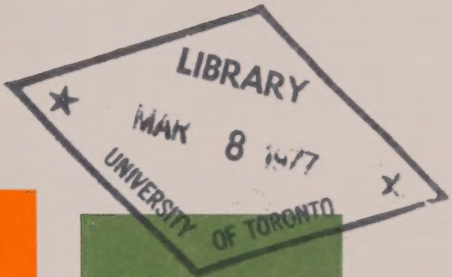
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In our highly industrialized society, jigs, fixtures, dies, tools, and gauges are essential to ensure the speed, accuracy, and volume of production.

As a tool maker, you will play a vital and distinguished role in the production process and so help maintain and improve modern living standards. For those interested in this challenging trade, the Industrial Training Branch of the Ministry of Colleges and Universities has established an apprenticeship training program to provide a remunerative career with unlimited prospects for advancement.

Qualifications

Applicants for apprenticeship must have passed their 16th birthday and have a high degree of emotional stability. A higher than average intelligence is required and, while many with a formal education of Grade 10 become successful, the Grade 12 technical graduate will have an advantage since this is sometimes a condition of employment in a great number of tool shops.

Duties

Toolmakers in today's society are versatile, possess good judgment, and are alert to new techniques and processes. They make, repair and modify dies, form cutting tools, jigs, fixtures, gauges, and moulds; make hand and machine tools to very close tolerances; and complete delicate precision jobs to within 1/10,000th of an inch.

They read and interpret blueprints and drawings, and from these will picture the finished job before it is even started. They operate drill presses, band saws, shapers, planers, lathes, milling, boring, grinding and other special machines; have the knowledge to supervise heat treating and welding; and must be able to freely impart detailed instructions to other tradesmen for setting up intricate machine shop lay-outs.

Training

The apprenticeship program consists of four periods of training and instruction of 2,000 hours each—the equivalent of approximately four years.

Upon completion of the course, the apprentice will be required to write a final examination and, if successful, will receive a Certificate of Apprenticeship.

While training on the job, the apprentice receives practical instruction from a journeyman/woman on lay-out, machine shop equipment, and machine shop practices, plus a grounding in all aspects of the latest techniques and manufacturing processes. The apprentice will also attend academic training courses at a College of Applied Arts and Technology. The basic course will be given during the first year to be followed by an intermediate course, and an advanced course which is offered in the final year of the program. In these courses, there are lectures on machine shop and tool room theory, mechanical drafting, design detail and mechanics of material. A program of related subjects in which emphasis is on practical applications of the material being studied completes the trade instruction.

When the apprentice attends these courses, the tuition fees, travelling expenses and a living allowance are paid by the Federal Department of Manpower and Immigration and the Ministry of Colleges and Universities under a shared-cost agreement.

Earning While Learning

Apprentices earn while they learn. Their wages are based on a percentage of those paid a journeyman/woman in the same trade in the same shop. During the first year they can expect to receive 50 percent of this rate. At the conclusion of each 2,000-hour period the apprentice must pass an examination and receive the recommendation of the employer before proceeding to the next level.

When apprentices complete the course and become journeymen/women, they may expect to earn a very good rate of pay, depending upon location and type of employment. Eventually, they may operate their own tool and die shop.

Employment

The majority of tool makers are employed in precision custom tool and die shops. Others join industrial organizations because training opens up many positions for them. After suitable work experience, the graduate may be employed in an engineering office or advance to a supervisory position in the tool room. The demand for tool makers is widespread, and the work is interesting and varied for the ingenious and diligent individual.

Enquiries

All enquiries concerning apprenticeship should be addressed to the nearest district office listed on the back of this leaflet, or to the Director, Ontario Industrial Training Branch, Ministry of Colleges and Universities, Mowat Block, 900 Bay Street, Toronto, Ontario, M7A 2B5.

District Offices
Industrial Training Branch

Barrie 728-1951
Belleville 968-8671
Brantford 756-5197
Brockville 345-0660
Chatham 352-2800
Cornwall 933-6080
Guelph 821-3770
Hamilton 527-9105
Hawkesbury 632-2759
Kenora 468-3128
Kingston 544-5400
Kitchener-Waterloo 884-5460
London 453-7190
North Bay 474-5509
Oshawa 576-0171
Ottawa 731-7100
Owen Sound 376-5790
Pembroke 735-1041
Peterborough 743-4172
St. Catharines 682-4313
Sarnia 542-7751
Sault Ste. Marie 949-3331
Stoney Creek 664-5116
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Thunder Bay 475-1605
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Toronto 965-4211
Windsor 254-8654

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